

EXISTENTIAL CORRELATES OF BURNOUT AMONG
MENTAL HEALTH PROFESSIONALS IN HONG KONG

A Thesis

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Yiu-kee Chan

Division of Psychology

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ABSTRACT

Review of the burnout research indicated that the existential aspect was neglected. As the nature of burnout appears to be similar to Frankl's (1959) depiction of existential neurosis, it was hypothesized that burnout would be negatively correlated with purpose in life, motivation to seek purpose, other-oriented, and value-oriented ways of life, but positively related to self-oriented, passive and hedonistic ways of life. Two hundred and thirty-eight mental health professionals in Hong Kong, composing of clinical psychologists, psychiatrists, psychiatric nurses, counselors, and social workers, were surveyed. Instruments included the Maslach Burnout Inventory, the Purpose-in-life Test, the Seeking of Noetic Goals Test, and the Ways of Life Test. Some of the hypotheses were supported, except the relationship between burnout with motivation to seek purpose and certain ways of life. Purpose in life and motivation to seek purpose were found to be significant predictors of burnout. Of the five professional groups, psychiatric nurses experienced the highest level of burnout and had the lowest purpose in life. Results were discussed in terms of Frankl's theorization. Empirical and practical implications were also suggested.

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CHAPTER I

INTRODUCTION

Maslach (1982a) delineated the unique facets of the job nature of various mental health professions (e.g., clinical psychologists, counselors, psychiatrists, psychiatric nurses and social workers). First, these professions usually focus on clients' problems and weaknesses rather than on strengths, and their main task is to ameliorate these problems. When these problems have been worked through, clients seldom maintain further contact with the professionals. Thus, whenever there is contact with the clients, the focus is mostly on the negative aspect. Secondly, the lack of positive feedback is another unique feature of the mental health professions. The clients are usually unable to give such feedback when they are in psychological disturbances. Also, they frequently direct strong, mostly negative, emotion towards the professional while the latter is to remain warm, patient, and accepting throughout. Thirdly, the daily activities of the mental health professionals are also charged with emotional stresses, such as having to deal with the chronic schizophrenic or the terminally ill, and these will make them feel helpless in terms of control, change and cure. Constant and in-depth contact with such experiences is probably very demanding psychologically, and this may result in "burnout" of the professionals (Maslach, 1986; Millon, Millon, & Antoni, 1986). Various detrimental consequences of burnout have

been documented, such as higher frequencies of somatic complaints (Jayaratne, Chess, & Kunkel, 1986), decrease of self esteem in the advanced phase of burnout (Golembiewski & Kim, 1989), increased stress and conflict in family and marital life (Piercy & Wetchler, 1987), tendency to deny the client's need for treatment (McGee, 1989), absenteeism from work (Firth & Britton, 1989), and even intention to leave the profession (Raquelpaw & Miller, 1989).

Voluminous amount of research in burnout of various mental health professions has been carried out since the 1970s (Freudenberger, 1989), including the psychiatric staff (Lipson & Koehlet, 1986), counselors (Beck, 1987), social workers (LeCroy & Rank, 1986), correctional therapists (de Paepe & Grocche, 1986), and clinical psychologists and clinical psychology trainees (Rodoffa, Kraft & Reilley, 1988). All point to the existence of burnout in varying degrees in these professions. Furthermore, Maslach and Jackson (1981) found that the mental health professions scored the lowest in Personal Accomplishment and highest in the Emotional Exhaustion in the Maslach Burnout Inventory.

In Hong Kong, Chan, Kwok, Li, and Yiu (1988) found that amongst the 324 counsellors they surveyed, over 60% reported experiencing significant frustration over their job situations (e.g. work overload, lack of resources and facilities) and 20% expressed dissatisfaction over their professional performance. Ngai (1986) found that

outreach social workers experienced a high level of occupational stress, and that significant positive correlations were reported between emotional exhaustion, excessive workload, role ambiguity, and job conflict. Besides, older professionals tended to have higher burnout than younger ones, a result echoed by Wong (1983)'s study of burnout in Hong Kong. Hence, it is evident that the mental health professionals in Hong Kong also experience burnout similar to their counterparts in the West.

Burnout, according to Freudenberger and Richelson (1980), refers to a condition of fatigue or frustration resulting from devoting to a cause, a way of life, or relationship that fails to produce expected reward. Goroff (1986) argued that burnout results from chronic disappointment, disillusionment, fatigue, hopelessness, and powerlessness that one experiences when one confronts contradictions between a desire to help others, and the structural limitations and demands of the environment. Along similar vein, Meier (1983) defined burnout as the lack of valued reinforcement, controlled outcome and personal competence, resulting in the expectancy of little reward but much punishment. Pines and Aronson (1981) depicted burnout as "characterized by physical depletion, feelings of helplessness and hopelessness, emotional draining, development of negative self-concept and negative attitude towards life, work, and failure in the quest

for ideals" (p. 15). Similarly, Edelwich and Brodsky (1980) wrote that burnout is a gradual loss of idealism, energy, purpose, and concern due to conditions of work and is rooted in the assumption that the real world will be in harmony with one's ideals. On the other hand, Levine (1982) remarked that burnout is the alienation of the helper from the client by professional helping skills and method, in which the real human contact does not exist. This was echoed by Karger (1983) who described burnout as the consequence of the alienation in the helper-client relationship: the reification of clients as cases and the routinization of the helping process, as well as the transformation of the skills of human interaction into a marketable commodity.

Amongst such definitions of burnout, Maslach (1982b) attempted to delineate commonalties. First, burnout occurs on an individual level. It is an internal psychological experience involving feelings, attitudes, motives and expectation; and is also a negative experience causing problems, distress, discomfort, dysfunction, or negative consequences. Apart from these common points, according to Maslach, three common underlying dimensions can also be identified: emotional exhaustion, i.e., a loss of feeling, concern, trust, interest, and spirit; depersonalization, i.e., the negative, inappropriate and irritable attitude towards the clients as well as loss of idealism; and low personal accomplishment, i.e., the negative response

towards oneself and a sense of low self-esteem, low moral, reduced capability, and withdrawal.

Many sources of burnout have been theorized and studied, including the organizational, interpersonal and personal factors. Although there are still controversy over these factors (Freudenberger, 1983), some findings are quite well established. Organizational factors consist of the lack of positive feedback about one's job performance (Maslach & Jackson, 1982; Pines, 1982), the lack of autonomy and control in carrying out one's job, or the lack of participation in organizational decisions (Golembiewski, Munzenrider, & Carter, 1983; Jackson, 1984; Maslach & Jackson, 1982; Maslach & Pines, 1977; Pines, 1982). Furthermore, conflicting role demands, ambiguity about one's job role, faulty management and supervision, and work pressures have also been linked to greater burnout (Cherniss, 1980; Maslach & Jackson, 1984; Pines, 1982; Savicki & Cooley, 1987).

As for the interpersonal factors, greater caseload and thus longer time spent with clients are positively correlated with burnout (Lewiston, Conley, & Blessing-Moore, 1981; Maslach & Jackson, 1982; Maslach & Pines, 1977; Savicki & Cooley, 1987). Moreover, when the nature of client contact is upsetting, frustrating, or difficult, burnout is more likely to occur (Maslach & Jackson, 1984; Meadow, 1981; Pines, 1981; Pines & Maslach, 1978). Finally, the risk of burnout is greater if the relationships with colleagues are unsupportive,

unpleasant, or hostile (Cherniss, 1980; Golembiewski et al., 1983; Leiter & Meechan, 1986).

With regard to the personal factors, greater burnout is related to one's unrealistic or unmet job expectations (Cherniss, 1980; Edelwich & Brodsky, 1980; Freudenberger & Richelson, 1980; Stevens & O'Neill, 1983; Warnath & Shelton, 1976). In addition, personal values may also be contributing factors. For example, the loss or lack of ideological commitment and moral purpose in work can lead to burnout (Cherniss & Krantz, 1983). The risk of burnout is also greater for people with certain personality characteristics, including low self-confidence (Heckman, 1980; McCraine & Brandsma, 1988), lack of assertiveness (Gann, 1979), inability to set limits (Freudenberger, 1975; Hendrix & Stahl, 1986), a strong need for approval by others, impatience and hostility (Gann, 1979), and external locus of control (Capel, 1987; Tetrick & LaRocco, 1987).

In general, most of the characteristics and personal sources of burnout are related to the existential and spiritual dimensions of human behaviour (Bulka, 1984, Freudenberger & Richelson, 1980; Pines & Aronson, 1981), which are uniquely human dimensions characterized by meaning, purpose, idealism, commitment, mission, and values (Elkins, Hedstrom, Hughes, Leaf, Saunders, 1988; Maslow, 1970; Ungersma, 1968).

Shafranske and Malony (1985) reported that 71% of the population they surveyed considered spirituality to be

personally relevant and significant. With a similar conclusion in their survey of the values of mental health professionals, Jensen and Bergin (1980) remarked that one's values guide his or her life style and might have significant relationship to one's mental health. However, the existential and spiritual aspects of human behaviors have long been ignored by researchers (Theodore, 1984) and even regarded as taboos (Mosley, 1972), resulting in a partial understanding of human behaviour which focuses only on the physical, psychological and social dimensions. Leading figures in various fields such as psychotherapy research, logotherapy, person-centered therapy, and transpersonal psychology (e.g. Bergin, 1985; Cosgrove & Mallory, 1977; Frankl, 1959; Jahoda, 1958; Rogers, 1973; Vaughan, 1986; Wilber, 1974) have repeatedly advocated for more theoretical and empirical attention to these important but neglected areas.

Frankl (1959, 1963, 1967, 1975, 1985), the father of logotherapy, was one of the pioneers in advocating the importance of the existential and spiritual dimensions in mental health. He coined the secular term "noetic" to distinguish it from "spiritual" which had religious connotations. He argued that the noetic dimension is the most important aspect of human being, and is related to the ability of self-detachment or self-transcendence. In fact, Frankl argued against personal hyper-reflection as advocated by the

traditional "depth-psychology". He encouraged people to devote themselves to external things as a way of living meaningfully and de-reflecting from their problems when in distress. This is the frequently used technique of dereflection in logotherapy. According to Frankl, the noetic dimension also involves one's tendency to treat others as unique human beings whom one loves and understand, rather than reified as objects to be used and manipulated. The most significant feature of the noos (i.e. the noetic dimension) is the inherent will to meaning and the state of tension (the noo-dynamics) aroused by the challenge of life to find meaning. Such meaning is not to be prescribed by an external authority; everyone is responsible to find meaning by himself or herself in every moment of life since life is unconditionally meaningful regardless of the nature of the situations.

Frankl (1959) maintained that there are three ways through which one finds meaning. First, through the process of committing oneself to the accomplishment of a task, one has given the world something out of one's creation. This creation, in turn, constitutes the uniqueness of one's existence and is a rich source of meanings yet to be discovered. Such a process can also be accomplished in love, i.e. the experience with another person in all his or her uniqueness and singularity. The second way through which one finds meaning is by way of human tragedy. Human tragedy and

inevitable suffering can be meaningful if one makes sense out of the superficial confusion, contradiction, and irrationality. Despair only results from suffering without meaning. Hence, inevitable suffering can be a good opportunity for human achievement. Attempts to avoid such suffering will lead to further distress. Lastly, one's values also help one to figure out the meaning of life situations. There are three kinds of values: creative values enable one to fulfill one's activities meaningfully out of the object or process one creates; experiential values are realized in moments of intense experience, such as the appreciation of beauty in the world; and attitudinal values help one accept the limiting factors on one's life and potentialities: i.e. accepting the unchangeable. Different values are required at different times and situations. Frankl (1963) also argued that failure to find or escape from searching for meaning will end up in an absence of the noo-dynamics, i.e., a nihilistic state called "noogenic neurosis". Noogenic neurosis is characterized by boredom, apathy, meaninglessness, valuelessness, cynicism, helplessness, and fatalism (Fabry, 1968) and is manifested by depression, aggression and addiction, which Frankl labeled the "neurotic triad". Thus noogenic neurosis resembles the pattern of disillusionment and disappointment exhibited by the burned-out professionals whose initial ideals and goals are frustrated (Freudenberger & Richelson, 1980; Goroff, 1986; Edelwich &

Brodsky, 1980). Frankl further suggested that such frustrated will to meaning will then be compensated and substituted by the striving for pleasure, excitement, happiness, power, sex, and conformity, after which the individual will still be in the state of noogenic neurosis because the existential vacuum has not yet been filled. This will eventually lead to the phenomena of "meaningless pleasure" and "senseless sex". Thus, Frankl sees the mere pursuit of happiness, seemingly the norm of modern societies, as doomed to despair. Happiness is the natural consequences in the process of one's successful search for meaning and it cannot be an end in itself.

Summing up, according to Frankl, one's meaning in life, the motivation to seek purpose in life, and certain logotherapeutic values are basic requirement of mental health and can act as buffer against distress, adversity in general, and maybe burnout in specific. Frankl's often quoted words from Nietzsche, "He who has a why to live for can bear with almost any how", illustrate the point well and are supported by numerous research. Lacocque (1980) reported that the experience of meaning in life was associated with higher scores on an index of mental health. Furthermore, purpose in life was found to be positively related to internal locus of control and life satisfaction (Fletcher, 1981), personality integration (Jalali-Tehrani, 1985), self-esteem (Schlesinger, 1983), and job satisfaction

(Ruffin, 1982). Conversely, the lack of meaning in life is associated with psychological disturbance or lower sense of well-being. For example, one's indecisiveness toward purpose in life was associated with lower level of personality maturity (Ho, 1982). Lower scores on purpose in life was related to delinquency, lower sense of responsibility and more hedonistic orientation (Breakthrough Outreach Team of the Youth Development Centre, 1989). Phillips (1980) found that students with depression had the lowest scores in purpose in life when compared to non-depressed subjects; and neuroticism was found to be negatively correlated with purpose in life. Moreover, Reker (1977) reported that inmates had significantly lower scores on the test measuring purpose in life than the normal control group, and students with drug involvement had less purpose in life than those non-drug users (Padelford, 1974; Shean & Fechtmann, 1971). Sallee and Casciani (1976) discovered that sex frustration was negatively associated with purpose in life.

Studies on the motivation to seek noetic goals also tended to confirm Frankl's assertion of its relationship to mental health. For example, among post-graduate level professionals, Thurman (1981) found that the toxic Type A components were negatively correlated with the motivation to seek noetic goals. In addition, those with irrational beliefs had lower motivation to seek noetic goals. Jones (1981) also reported that the clients'

motivation to seek noetic goals were increased as a result of therapeutic success.

Research has also been done on the relationship between values espoused and various indices of mental health. Cormier (1979) reported that those who perceived life as an opportunity to pursue value-relevant behavior together with an obligation to society and conscience had higher scores on mental health than those without such value orientations. Moreover, among helping professionals, those with value on interpersonal support, concern for others and benevolence were less depersonalized towards their clients (Poehler, 1982; Warnberg, 1986). Similarly, those with intrinsic work values, i.e., those who conceived their work as inherently worthwhile, had higher intrinsic job satisfaction (Steiner, 1985).

The relationship between purpose in life and values espoused was also studied. Crandall and Rasmussen (1975) found that high purpose in life scores were related to intrinsic religious orientation and genuine endorsement of religious values. Similarly, high purpose in life was associated with an emphasis on being intellectual, responsible and broad-minded (Simmons, 1980). On the other hand, both Crandall and Rasmussen (1975) and Simmons (1980) discovered that low purpose in life was related to hedonistic values of pleasure, excitement and comfort which is consistent with Frankl's depiction of the manifestation of the existential vacuum.

To recapitulate, past research has indicated that a sense of purpose in life, motivation to seek noetic goals and various logotherapeutic values are related to one's psychological well-being and are strong buffers against stressful and adverse situations.

Purpose of the study

As mentioned earlier, the job nature of the mental health professionals is problem-oriented and emotion-laden (Maslach, 1982a), and is prone to burnout (Millon et al, 1986). Thus, if these professionals have a sense of meaning and purpose in life, as well as the motivation to seek noetic goals, they may ameliorate and even prevent the occurrence of burnout. Past research on burnout has all been focused on the non-existential aspects, i.e., the personal, interpersonal and organizational factors, which is a pattern of research that psychology cannot afford in the modern era of existential neurosis (Theodore, 1984). Moreover, Freudenberger (1989), in his writing about the past, present, and future concern of burnout, also advocated the examination of the spiritual dimension. The present study attempted to determine the various existential correlates of burnout and is the first study on this unexplored area of burnout, especially among mental health professionals in Hong Kong. Specifically, the following hypotheses were tested:

- (1) Purpose (or meaning) in life is negatively correlated with burnout, i.e., the more meaning one

achieves in life, the lesser degree of burnout one experiences.

(2) The motivation to find meaning and purpose in life is negatively correlated with burnout, i.e., those with a stronger motivation to find meaning in life are less likely to experience burnout.

(3) Burnout is positively correlated with self-oriented, passive and hedonistic ways of life, but negatively correlated with other- and value-oriented ways of life.

In addition, exploratory comparisons of the five groups of mental health professionals (i.e. clinical psychologists, psychiatrists, psychiatric nurses, counselors, and social workers) on the degree of burnout, purpose in life, motivation to seek noetic goals, and the different value orientations were made.

CHAPTER II

METHOD

Subjects

Subjects were sampled from the population of mental health professionals of Hong Kong, including clinical psychologists, psychiatrists, psychiatric nurses, counsellors, and social workers. They were approached by mail to participate voluntarily in a study on job stress via respective associations and organizations listed in Appendix A. A total of 619 questionnaires (Appendix B) were sent, of which 253 were returned, yielding an overall response rate of 38.45% (Appendix C). Given the limitation in resources and time, as well as the intrinsic shortcomings of mailed survey (Oppenheim, 1966), such a response rate can be acceptable although the generalizability of the findings may be limited. Out of those returned, 15 were invalid (i.e., those with much information absent, such as missing a whole subscale or important demographic data, as well as those with professions not fitting into this study, e.g., general practitioner), leaving a total of 238 valid cases. The response rate was highest amongst clinical psychologists (45.10%, $N = 23$), followed by social workers (41.82%, $N = 46$), psychiatric nurses (40.40%, $N = 120$), counsellors (32.40%, $N = 22$), and psychiatrists (29.03%, $N = 27$). Although the five subgroups vary in their sizes, they are comparable to the relative sizes of the populations of mental health professionals in

Hong Kong, with the exception of counsellors and social workers: psychiatric nurses occupying the largest share ($N = 882$, Association of Government Nursing Staff, 1989), followed by psychiatrists ($N = 93$, Hong Kong Psychiatric Association, 1989) and clinical psychologists ($N = 51$, Hong Kong Psychological Society, 1989).

Appendices D1 and D2 show the means, standard deviations, and frequencies of all demographic variables for the total population. The sex distribution in the total population was approximately equal, with 114 males (47.90%) and 124 females (52.10%). Overall, the whole group showed a mean age of 32.21 years, with an average monthly income of \$12,500. The average number of years working in the mental health field was 9.10 years. The majority (65%) of them worked in hospital or clinic settings, followed by welfare agencies, academic, and correctional settings. The demographic particulars of each group were as follows and the intergroup variability, especially in income and sex distribution, can be noted.

Clinical Psychologists. The total number for this group was 23, with 39.1% males ($N = 9$) and 60.9% females ($N = 14$) (Appendices D3 and D4). The mean age was 34.22 years old. On average they entered the profession for 7.66 years and worked 45.30 hours per week with a monthly income of \$22,731. About one-third of them (34.8%) worked in hospital setting and their major task

was clinical work (82.6%). The majority of them (86.9%) held Master's Degree, either with Cognitive/Behavioral (34.8%) or Eclectic theoretical orientations (30.4%).

Psychiatrists. Appendices D5 and D6 show that nearly all of the psychiatrists (93.3%) were males. On average, this group was 36.41 years old, having worked in the field for 10.24 years and working 48.31 hours per week, with a monthly income of \$38,257. All of them worked in hospitals, with clinical work being the normative type of work (96.3%).

Psychiatric Nurses. Appendices D7 and D8 indicate that the sex distribution in this group was equal, with a mean age of 32.22 years. They worked an average of 11.33 years in the field, earning a monthly income of \$13,092. The majority of them (79.2%) engaged in clinical work.

Counsellors. There were a total of 22 subjects in this group (Appendices D9 and D10), with 31.82% males and 68.18% females. On average, they were 34.64 years old, entered the field for 8.49 years, and worked 38.77 hours per week with a monthly income of \$13,369. The majority were Christians (68.2%). They worked either in welfare agencies or schools/colleges (45.5% & 54.5% respectively). Slightly more than half of them held Master's degrees (59.1%), while the remaining holding mostly Bachelor's degrees (36.4%). The Humanistic theoretical orientation accounted for the largest share (36.4%), followed by Cognitive/behavioral (13.6%).

Social Workers. Appendices D11 and D12 show that there were a total of 46 subjects in this group, with 26.09% males and 73.91% females. The average person in this group was 27.54 years old, entered the field for 4.02 years, and worked 42.28 hours per week, with a monthly income of \$9,282. The majority (63.0%) worked in welfare setting and 89.1% of them claimed that case work was the typical task. Most of them held Bachelor's degrees (47.8%), followed by Diploma and Master's degrees (41.7% & 10.9% respectively).

Instruments

Measure of burnout. The level of burnout was measured by the Maslach Burnout Inventory (Maslach and Jackson, 1981) which contains a total of 22 items with three subscales: emotional exhaustion, depersonalization, and personal accomplishment. The response format is in the form of a 7-point scale, ranging from 0 as "Never" to 6 as "Every day", representing different frequency of having certain feelings and attitudes towards the job depicted in each item. According to Maslach and Jackson (1981), internal consistency reliabilities (Cronbach's coefficient alpha) were .90 for Emotional Exhaustion, .79 for Depersonalization, and .71 for Personal Accomplishment. The test-retest reliabilities (two to four weeks interval) were .82 for Emotional Exhaustion, .60 for Depersonalization, and .80 for Personal Accomplishment. A low degree of burnout is reflected in low scores on the Emotional Exhaustion and

Depersonalization subscales and high scores on the Personal Accomplishment subscale. For the present study, factor analysis using principal factoring and varimax rotation yielded three factors with items similar to those of Maslach and Jackson (1981), and the Cronbach's coefficient alphas for emotional exhaustion, depersonalization, and personal accomplishment were .86, .72, and .79 respectively.

Measure of purpose and meaning in life. The Purpose in Life Test (PIL) was designed by Crumbaugh and Maholick (1969) to measure the degree to which an individual experiences a sense of meaning and purpose in daily life and to detect existential vacuum. The test consists of 20 items in a 7-point Likert scale, ranging from 1 "strongly disagree" to 7 "strongly agree", with higher scores reflecting increasing purposefulness and meaningfulness in life. Reker and Cousin (1979) reported that the test-retest (6-week interval) correlation coefficient was .79 and the split-half correlation coefficient was .87. Significant correlations were found between PIL and the Life Area Survey (LAS) ($r_s = .65$ between PIL and attitude towards life at present, and .41 for attitude towards life in future; (Osgood, Suci & Tannenbaum, 1957). For the present study, the Cronbach's split-half reliability coefficient was satisfactory ($r = .88$; $p < .005$).

Measure of the strength of motivation to find meaning and purpose in life. The strength of motivation

to find meaning in life was measured by the Seeking of Noetic Goals (SONG) Test (Crumbaugh, 1975), which consists of 20 items in a 7-point Likert scale, ranging from 1 "rarely" to 7 "constantly", with higher scores reflecting a stronger motive to find meaning. The split half correlation coefficient was .87 and the test-retest (6-week interval) correlation coefficient was .78. (Reker & Cousin, 1979). This scale was also negatively correlated with Life at Present of the Life Area Survey ($r = -.30$). For the present data, the Cronbach's split-half reliability coefficient was .88.

Measure of value orientation. Morris (1956) designed the Ways of Life Test to measure the endorsement/rejection to various ways of life as a measure of value orientation. The current version is an adaptation of Morris's (1956) original longer version (Sommers & Scioli, 1986). The test consists of five items, each rated on a 5-point scale, ranging from 1 "strongly disagree" to 5 "strongly agree". The five ways of life are other orientation (way 1), self orientation (way 2), passive orientation (way 3), value orientation (way 4), and hedonistic orientation (way 5). The test-retest (14-week interval) reliability coefficient was .87 (Morris, 1956). All scales correlated well with other value-related measures, e.g. Personal Value Scale (Scott, 1965), and Social Values Questionnaire (Perloe, 1967), Ethical Position Questionnaire (Forsyth, 1980), and Locus of Control (Rotter, 1966).

Procedures

Packages of questionnaires written in English (Appendix B, as the target population at least have F.5 level of education [the group of psychiatric nurses], the use of English as the medium should pose no problem) were mailed to individual subjects with self-addressed stamped envelopes via their respective organizations (Appendix A) between July and November, 1989. Each package consisted of a covering letter introducing the purpose of the study, a demographic survey, and the four scales: the Maslach Burnout Inventory, the Purpose in Life Test, the Seeking of Noetic Goals Test, and the Ways of Life Test. Subjects were assured that individual responses would be kept in strict confidence and were instructed to mail the completed questionnaires back to the researcher individually and directly. No third parties, such as the supervisors of the subjects, were involved in the process of returning the questionnaires. The whole package took about 30 minutes to complete.

CHAPTER III

RESULTS

Appendices E1 to E6 indicate the means and standard deviations of the ten major variables for the total population and the five subgroups: emotional exhaustion, depersonalization, personal accomplishment, purpose-in-life, motivation to seek purpose, way 1 of life (other-oriented), way 2 of life (self-oriented), way 3 of life (passive), way 4 of life (value-oriented) and way 5 of life (hedonistic). For all the mental health professionals, the scores in the three burnout indicators (i.e., emotional exhaustion, depersonalization, and personal accomplishment) were in the moderate range, according to the categorization of Maslach and Jackson (1981) which was derived from a normative sample of 11,607 subjects. Similar patterns were also noted in the five groups of professionals, except that the mean depersonalization scores of clinical psychologists and counsellors were within the low range, and that the average personal accomplishment score of psychiatric nurses was in the low category.

Demographic Variables

Effects of demographics on various variables are included in Tables 1 and 2. Table 1 shows the sex and marital differences in the major variables. Compared to males, females had a higher motivation to seek purpose ($M_s = 64.37, 70.49$; $t = -3.10$; $df = 221$; $p < .005$) and were less hedonistic ($M_s = 3.40, 3.06$; $t = 2.25$; $df =$

236; $p < .05$). However, no sex difference was found in

Table 1

Two-tailed t-test results for dichotomous demographic variables

	Sex	Marital Status
Emotional Exhaustion	-1.09	-.29
Depersonalization	.76	-.23
Personal Accomplishment	.78	1.96
Purpose-in-life	-.58	1.03
Motivation to seek purpose	-3.10*** (F > M)	-3.45*** (MA < S)
Way 1: Other-oriented	-.87	1.05
Way 2: Self-oriented	-.56	-1.50
Way 3: Passive	-1.24	-2.44* (MA < S)
Way 4: Value oriented	-1.94	-.55
Way 5: Hedonistic	2.25* (M > F)	-.52

Note: * $p < .05$; ** $p < .01$; *** $p < .005$; **** $p < .0001$
M = Male; F = Female; MA = Married; S = Single

the three burnout variables, purpose-in-life, and the remaining four ways of life. In addition, single subjects were more motivated to seek purpose, ($M_s = 71.61, 64.72$; $t = 3.45$; $df = 223$; $p < .005$) and less

passive in their way of life ($\underline{M}s = 2.90, 3.24$; $\underline{t} = -2.44$; $\underline{df} = 235$; $p < .05$), as compared to married subjects. On the other hand, they were not significantly different on the three burnout variables, purpose-in-life, and the other four ways of life.

One-way ANOVAs (Table 2) indicated that significant main effects for work setting were found on depersonalization, personal accomplishment, purpose in life, other-oriented and value-oriented ways of life ($\underline{F}s = 7.35, 2.65, 4.03, 3.97, 7.20$, respectively; $p_s < .05$). Post hoc analyses (LSD procedure) indicated that those working in the hospital setting were more depersonalized, had lower scores in purpose in life and were less value-oriented than those working in welfare agencies and school/ college setting ($\underline{M}s = 9.46, 5.52, 6.36$, for depersonalization, $\underline{M}s = 95.92, 102.42, 105.36$ for purpose in life, $\underline{M}s = 3.72, 4.09, 4.27$ for value-oriented way of life respectively, $p_s < .05$). Those professionals working in schools/colleges reported more personal accomplishment than those working in hospital setting ($\underline{M}s = 36.64, 33.04$, respectively; $p < .05$), and professionals working in the correctional setting were less other-oriented in their way of life ($\underline{M} = 2.67$) than those in hospitals, welfare agencies, and schools/ colleges ($\underline{M}s = 3.89, 3.84, 4.03$, respectively; $p < .05$). Significant main effect was also found for religious belief on personal accomplishment, purpose in life, motivation to seek purpose, and hedonistic way of life

Table 2

One-way ANOVA results for demographic variables

	EE	DP	PA	PIL	SONG
Reli- gion	1.22	1.16	6.63**** R4 < R1, R2, R3	11.84**** R4 < R1, R2, R3	4.62*** R2 < R1, R4
Work Setting	.94	7.35**** S1 > S3, S4	2.65* S1 < S4	4.03** S1 < S3, S4	1.33
Nature of work	1.05	.48	.24	.52	3.37* W3 < W1
Highest Degree	1.31	6.98**** D1 > D2, D3, D4	6.49**** D1 < D2, D3, D4	3.59** D1 < D3	5.17**** D4 < D1 D2, D3
Theoretical Orient- ation	.30	.64	1.63	1.04	2.44

Note: *p < .05; **p < .01; ***p < .005; ****p < .001

EE = Emotional Exhaustion, DP = Depersonalization,
PA = Personal Accomplishment, PIL = Purpose in Life,
SONG = Motivation to seek purpose

For Religion, R1 = Christianity; R2 = Catholic;
R3 = Others; R4 = Nil.

For Work Setting, S1 = Hospital; S2 = Correctional;
S3 = Welfare Agency;
S4 = School/College

For Nature of Work, W1 = Clinical/Case; W2 = Teaching;
W3 = Administration/Supervision.

For Highest Degree, D1 = Diploma; D2 = Bachelor;
D3 = Master; D4 = MRCP;
D5 = Doctor.

Table 2 - Continued

One-way ANOVA results for demographic variables

	W1	W2	W3	W4	W5
Reli- gion	2.01	1.50	1.76	1.75	3.05* R3 < R1, R2, R4
Work Setting	3.97** S2 < S1, S3, S4	1.15	.37	7.20**** S1 < S3, S4	.38
Nature of Work	.57	5.13** W3 < W1	1.82	7.14*** W3 < W1, W2	2.00
Highest Degree	1.63	2.14	2.32	4.36*** D1 < D2, D3	1.06
Theore- tical Orient- ation	.93	1.34	1.07	.60	.33

Note: *p < .05; **p < .01; ***p < .005; ****p < .001
W1 = Other-oriented way of life, W2 = self-oriented way of
life, W3 = passive way of life, W4 = value-oriented way of
life, W5 = hedonistic way of life.
For Religion, R1 = Christianity; R2 = Catholic;
R3 = Others; R4 = Nil.
For Work Setting, S1 = Hospital; S2 = Correctional;
S3 = Welfare Agency;
S4 = School/College
For Nature of Work, W1 = Clinical/Case; W2 = Teaching;
W3 = Administration/Supervision.
For Highest Degree, D1 = Diploma; D2 = Bachelor;
D3 = Master; D4 = MRCP;
D5 = Doctor.

($F_s = 6.63, 11.84, 4.62, 3.05$ respectively; $p_s < .05$). Post-hoc analyses indicated that those with no religious belief had lower sense of personal accomplishment ($M = 35.71$) than those with Christianity, Catholic, and other religious beliefs ($M_s = 35.54, 41.17, 32.13$ respectively; $p < .001$). Those with no religious belief also had less sense of purpose in life ($M = 92.79$) than the other three groups: Christianity, Catholic, and other religious beliefs ($M_s = 95.92, 102.42, 105.36$, respectively; $p < .05$). Besides, the Catholics were less motivated to seek purpose than the Christians and those with no religious beliefs ($M_s = 57.52, 69.42, 68.29$, respectively; $p < .05$). Finally, those with religious beliefs other than Christianity and Catholics were less hedonistic in their way of life than the Christians, Catholics, and those with no religious beliefs ($M_s = 2.00, 3.15, 3.26, 3.73$, respectively; $p < .05$).

Analyses of Variance

A one-way multivariate analysis of covariance (MANCOVA) test using age and income as the covariates (because these two variables correlated significantly with the motivation to seek purpose, and most of the ways of life, as shown in the intercorrelation table; besides, past research showed that the relationship of these two variables to burnout was well established, see, for example, Maslach & Jackson, 1981) was performed for the five groups of professionals on the ten major variables, so that any group differences in these

variables can be detected. Sex was not included since it is not the purpose of the of this analysis to find out sex difference. Results showed a significant overall effect ($F = 2.59$; $p < .001$). Subsequent one-way ANCOVA results showed that the five groups of professionals differed on depersonalization and personal accomplishment ($F_s = 9.95, 4.43$, respectively; $p_s < .005$), but not on emotional exhaustion. Post hoc analysis (LSD procedure) indicated that psychiatric nurses were consistently more depersonalized ($M = 10.24$) when compared to each of the other four groups: clinical psychologists, psychiatrists, counsellors and social workers ($M_s = 5.35, 7.54, 4.86, 6.48$, respectively; $p_s < .05$). Psychiatric nurses also reported less personal accomplishment than clinical psychologists, counsellors and social workers ($M_s = 31.99, 36.00, 37.91, 34.93$, respectively; $p < .05$). For the existential variables, significant effects for the five groups were also found on purpose in life and value-oriented way of life ($F_s = 5.34, 5.48$ respectively; $p_s < .001$). Post-hoc analysis showed that psychiatric nurses reported having less purpose in life than psychiatrists, counsellors, and social workers ($M_s = 93.76, 103.30, 107.23, 103.18$, respectively; $p < .05$); and were less value-oriented in their way of life than clinical psychologists, counsellors, and social workers. ($M_s = 3.69, 4.30, 4.14, 4.15$, respectively; $p_s < .05$). Thus, psychiatric nurses were very different from the other four groups in most of the variables studied.

Intercorrelations

Intercorrelations among the ten major variables are represented by Table 3. For the three burnout subscales, emotional exhaustion was positively correlated with depersonalization, motivation to seek purpose, and passive way of life ($r_s = .55, .44, .16$, respectively; $p_s < .01$), but negatively correlated with age, personal accomplishment and purpose-in-life ($r_s = -.14, -.22, -.27$, respectively; $p_s < .05$). Depersonalization was positively related to working hours per week, motivation to seek purpose, passive way of life and hedonistic way of life ($r_s = .13, .31, .12, .18$, respectively; $p_s < .05$), but negatively correlated with age, annual income, personal accomplishment, and purpose-in-life ($r_s = -.16, -.15, -.31, -.33$, respectively; $p_s < .05$). Personal accomplishment was found to be positively related to purpose-in-life, other-oriented way of life and value-oriented way of life ($r_s = .51, .13, .19$ respectively; $p_s < .05$), but negatively correlated with motivation to seek purpose and passive way of life ($r_s = -.15, -.16$ respectively; $p_s < .05$).

For the existential variables, purpose-in-life was positively related to other-oriented way of life ($r_s = .15$; $p < .05$) but negatively correlated with passive way of life and hedonistic way of life ($r_s = -.19, -.13$ respectively; $p_s < .05$). Motivation to seek purpose was positively correlated with self-oriented, passive and value-oriented ways of life ($r_s = .15, .17,$

Table 3

Intercorrelations among variables

Variables	Emotional Exhaustion	Depersonal- ization	Personal Accomp- lishment
Age	-.14*	-.16**	.12*
Years in the post	-.15*	-.05	.03
Years in the field	-.05	-.03	.07
Working hours per week	.02	.13*	-.02
Days of annual leave	-.02	.05	-.05
Annual income	-.11*	-.15*	.15*
Emotional Exhaustion	1.00	.55****	-.22****
Depersonal- ization	.55****	1.00	-.31****
Personal Accomplish- ment	-.22****	-.31****	1.00
Purpose-in- life	-.27****	-.33****	.51****
Motivation to seek purpose	.44****	.31****	-.15*
Way 1	.08	.04	.13*
Way 2	.03	.02	-.03
Way 3	.16**	.12*	-.16**
Way 4	-.07	-.06	.19***
Way 5	.07	.18***	-.04

Note: * $p < .05$; ** $p < .01$; *** $p < .005$; **** $p < .001$

Table 3 - Continued

Intercorrelations among variables

Variable	Purpose in life	Motivation to seek purpose
Age	.07	-.34****
Years in the post	.09	-.37****
Years in the field	-.03	-.32****
Working hours per week	-.03	-.02
Days of annual leave	-.05	-.06
Annual income	.06	-.34****
Emotional Exhaustion	-.27****	.44****
Depersonalization	-.23****	.31****
Personal Accomplishment	.51****	-.15*
Purpose-in-life	1.00	-.08
Motivation to seek purpose	-.08	1.00
Way 1	.15*	.07
Way 2	.00	.15*
Way 3	-.19***	.17**
Way 4	.13*	.12*
Way 5	-.13*	.03

Note: * $p < .05$; ** $p < .01$; *** $p < .005$; **** $p < .001$

Table 3 - Continued

Intercorrelations among variables

Variable	Way 1	Way 2	Way 3	Way 4	Way 5
Age	-.05	.06	-.15*	-.13*	-.02
Years in the post	.02	.02	-.13*	-.15**	-.03
Years in the field	.01	-.01	-.11	-.21***	-.04
Working hours per week	-.03	-.02	-.01	-.01	.05
Days of annual leave	.08	.01	-.04	-.16**	.14*
Annual income	-.12*	.12*	-.22****	-.03	.10
Emotional Exhaustion	.08	.03	.16**	-.07	.07
Depersonalization	.04	.02	-.12*	-.06	.18***
Personal Accomplishment	.13*	-.03	-.16**	.19***	-.04
Purpose-in-life	.15*	.00	-.19***	.13*	-.13*
Motivation to seek purpose	.07	.15*	.17**	.12*	.03
Way 1	1.00	-.21***	-.05	.00	-.15*
Way 2	-.21***	1.00	.02	-.02	.16**
Way 3	-.05	.02	1.00	-.02	.11*
Way 4	-.00	-.02	-.02	1.00	-.03
Way 5	-.15*	.16**	.11*	-.03	1.00

Note: * $p < .05$; ** $p < .01$; *** $p < .005$; **** $p < .001$

.12 respectively; $p_s < .05$), but negatively correlated with age, years in the field, and annual income ($r_s = -.34, -.32, -.34$ respectively; $p_s < .001$). The various ways of life were also correlated with all major variables and their results were indicated in Table 3.

Multiple Regression Analyses

Multiple regression results for all the subjects were represented in Table 4 with emotional exhaustion,

Table 4

Stepwise Multiple Regression Analysis for total population

Dependent Variables	Step	Variable entered	R	% of unique variance accounted for
Emotional Exhaustion	1	SONG	.43*	18.5%*
	2	PIL	.49*	5.4%*
Depersonalization	1	PIL	.32*	10.3%*
	2	SONG	.42*	7.5%*
	3	W5	.44*	1.7%*
Personal Accomplishment	1	PIL	.51*	25.9%*
	2	W4	.53*	2.5%*

Note: * $p < .001$

The independent variables for each regression are PIL, SONG, W1, W2, W3, W4, W5, age, & income.
PIL = Purpose in Life; SONG = Motivation to seek purpose;
W1 = Way 1: Other-oriented; W2 = Way 2: Self-oriented;
W3 = Way 3: Passive; W4 = Value-oriented;
W5 = Way 5: Hedonistic.

depersonalization, and personal accomplishment as the criterion variables, each having nine predictor variables: purpose in life, motivation to seek purpose, the five ways of life, age and income. The reason age

and income were also included is that these two variables correlated significantly with the burnout variables and hence may be important variables in the regression analyses. Results showed that for emotional exhaustion, the multiple R was .49 (R squared = .24, $p < .001$). However, a stepwise multiple regression analysis revealed that the best predictor for emotional exhaustion was the motivation to seek purpose, it itself alone accounted for 18.5% of the variance. The second best predictor was purpose in life, accounting for 5.4% of the variance. In other words, these two existential variables explained 23.9% of the variance on emotional exhaustion. For depersonalization, the multiple R was .44 (R squared = .19, $p < .001$). A stepwise multiple regression analysis showed that the best predictor was purpose in life which accounted for 10.3% of the variance ($p < .001$), followed by motivation to seek purpose and hedonistic way of life, accounting for 7.5% and 1.7% of the variance respectively. Altogether, these three variables explained 19.5% of the variance in depersonalization ($p < .001$). For personal accomplishment, the multiple R was .53 (R squared = .28, $p < .001$). Stepwise multiple regression showed that the best predictor was purpose in life which accounted for the most variance (25.9%; $p < .001$). The second best predictor was value-oriented way of life which accounted for 2.5% of the variance. Taken together, these two variables explained 28.4% of variance in personal

accomplishment ($p < .001$).

Multiple regression analyses were also performed for each of the five subgroups. For emotional exhaustion (Table 5), the best predictors were purpose in life for psychiatrists ($R = .75$; $R^2 = .56$; $p < .001$) and motivation to seek purpose for psychiatric nurses and counsellors ($R_s = .55, .52$, respectively; $R_s^2 = .30, .27$, respectively; $p_s < .05$). There were no significant predictors for clinical psychologists and social workers.

Table 5

Stepwise Multiple Regression Analysis on Emotional Exhaustion for each of the five groups

Group	Step	Variable	R	% of unique variance accounted
Clinical Psychologists	1	SONG	.41	16.4%
Psychiatrists	1	PIL	.60***	36.5%***
	2	SONG	.75****	19.8%**
Psychiatric Nurses	1	SONG	.47****	21.1%****
	2	PIL	.55****	8.3%***
Counselors	1	SONG	.52*	27.0%*
Social Workers	1	SONG	.33	4.17%

Note: * $p < .05$; ** $p < .01$; *** $p < .005$; **** $p < .001$

The independent variables are PIL, SONG, W1, W2, W3, W4, W5, age, and monthly income.

PIL = Purpose in life; SONG = Motivation to seek purpose;

W1 = Way 1: Other-oriented; W2 = Way 2: Self-oriented;

W3 = Way 3: Passive; W4 = Value-oriented;

W5 = Way 5: Hedonistic

INCOME = monthly income

With regard to depersonalization (Table 6), the best predictor for counsellors was purpose in life ($R = .55$, $R^2 = .30$, $p < .05$). For the remaining groups, with the exception of clinical psychologists, the best predictor was motivation to seek purpose, ($R_s = .54$ for psychiatrists, $.41$ for psychiatric nurses, and $.40$ for social workers, respectively; R^2 s squared = $.29$, $.17$, and $.16$ respectively, $ps < .05$).

Table 6

Stepwise Multiple Regression Analysis on Depersonalization for each of the five groups

Group	Step	Variable	R	% of unique variance accounted
Clinical Psychologists	1	PIL	.33	11.0%
Psychiatrists	1	SONG	.54**	29.3%**
Psychiatric Nurses	1	SONG	.31***	9.7%***
	2	PIL	.41****	7.4%***
Counselors	1	PIL	.55*	30.1%*
Social Workers	1	SONG	.40*	16.0%*

Note: * $p < .05$; ** $p < .01$; *** $p < .005$; **** $p < .001$
 The independent variables are PIL, SONG, W1, W2, W3, W4, W5, age, and monthly income.
 PIL = Purpose in life; SONG = Motivation to seek purpose;
 W1 = Way 1: Other-oriented; W2 = Way 2: Self-oriented;
 W3 = Way 3: Passive; W4 = Value-oriented;
 W5 = Way 5: Hedonistic
 INCOME = monthly income

For personal accomplishment (Table 7), purpose in life emerged as the best predictor for psychiatrists, psychiatric nurses, and clinical psychologists ($R_s = .47, .47, .73$, respectively; R_s squared = .22, .22, .53 respectively, $p_s < .05$). For social workers, the best predictor was monthly income ($R = .57$, R squared = .32, $p < .05$), while there was no significant predictor for counsellors.

Table 7

Stepwise Multiple Regression Analysis on Personal Accomplishment for each of the five groups

Group	Step	Variable	R	% of unique variance accounted
Clinical Psychologists	1	PIL	.73****	53.3%****
Psychiatrists	1	PIL	.47*	22.1%*
Psychiatric Nurses	1	PIL	.47****	22.3%****
	2	SONG	.52****	4.7%*
Counselors	1	PIL	.37	13.7%
Social Workers	1	INCOME	.49***	23.6%***
	2	W1	.57***	9.1%*

Note: * $p < .05$; ** $p < .01$; *** $p < .005$; **** $p < .001$
 The independent variables are PIL, SONG, W1, W2, W3, W4, W5, age, and monthly income.
 PIL = Purpose in life; SONG = Motivation to seek purpose;
 W1 = Way 1: Other-oriented; W2 = Way 2: Self-oriented;
 W3 = Way 3: Passive; W4 = Value-oriented;
 W5 = Way 5: Hedonistic
 INCOME = monthly income

CHAPTER IV

DISCUSSION

Our results showed that purpose in life was negatively related to emotional exhaustion and depersonalization, and positively correlated to personal accomplishment, thus supporting our first hypothesis that burnout and purpose in life is negatively correlated. However, contrary to our second hypothesis, burnout was found to be positively correlated with motivation to seek purpose. For the ways of life, other-oriented and value-oriented way of life were negatively correlated with burnout only in the dimension of personal accomplishment. Hedonistic way of life was positively related to the depersonalization dimension of burnout only, while passive way of life was positively correlated with burnout in all three dimensions as hypothesized. However, self-oriented way of life was not significantly related to burnout at all. Although not all correlations between the ways of life and burnout were significant, most of them (except correlations between other-oriented way of life with emotional exhaustion and depersonalization) were in the expected directions. Subsequent stepwise regression analyses showed that motivation to seek purpose was the best predictor for emotional exhaustion, while purpose in life was the best predictor for depersonalization and personal accomplishment.

The first hypothesis on the negative correlation between purpose in life and burnout was supported, and results showed that the stronger the purpose in life, the less likely is one to experience burnout. This is consistent with Frankl's (1959, 1963) assertion that having a sense of meaning and purpose in life has a buffering effect against distress. This is also in line with previous research which reports the positive relationships among purpose in life, mental health (Lacocque, 1980) and life satisfaction (Fletcher, 1981), as well as that between burnout and lack of moral purpose (Cherniss & Krantz, 1983).

The finding that motivation to seek purpose was positively correlated with burnout needs further explanation since it is directly contradictory to Frankl's (1959, 1963) assertion of the negative relationship between the motivation to seek purpose and noogenic neurosis. Speculation may rest on the possibility of a non-linear relationship between them, i.e., burnout does not change in the same magnitude and direction for every unit change of the motivation to seek purpose. an example may include curvilinear relationships, i.e. a low or high level of motivation may facilitate high level of burnout whereas moderate level of motivation maintains a low level of burnout. However, after plotting the standardized residual of scores of the three burnout variables against the motivation to seek purpose scores, results showed a

random distribution, thus ruling out the presence of a non-linear relation. Another reason may be the interaction effect of motivation to seek purpose with other factors, e.g. purpose in life, on burnout. In other words, burnout may be highest for those with low purpose in life but high motivation to seek purpose. Nevertheless, subsequent regression analyses eliminated this possibility as the amount of variance accounted for by this interaction effect (the scores of the interaction term were derived by multiplying the scores of purpose in life and motivation to seek purpose of each subject) on each of the three burnout indicators were all non-significant ($p_s > .05$). Further plotting the standardized residual of the scores of the three burnout variables against this interaction term also resulted in a random distribution. Therefore, the possibility of curvilinear relationships between the three burnout variables and the interaction effect of purpose in life and motivation to seek purpose is then rejected. However, the possibility that motivation to seek purpose may interact with other variables on burnout cannot be ruled out completely as other intervening factors such as job frustration, excessive work load, endorsement of unrealistic ideals, or the degree of disillusion about the profession have not been looked at in this study.

The negative relationship between value-oriented way of life and burnout is consistent with Cormier's

(1979) finding that those who perceived life as an opportunity to pursue value-relevant behaviour had higher scores on mental health. That other-oriented way of life was negatively correlated with burnout is also in line with Warnberg's (1986) finding that one's value on interpersonal support and concern for others were negatively related to burnout.

The finding that the correlations between other-oriented way of life and emotional exhaustion and depersonalization was not in the expected direction warrants further explanation. Instead of the negative correlation as suggested by Warnberg (1986), the present results showed non-significant correlation in the opposite direction. Examination of the content of the other-oriented way of life subscale revealed that it focused on the theme of cooperation and group participation, which may have little to do with the nature of the helping relationship as characterized by empathy and emotional commitment. Hence, such a way of life may not be correlated with emotional exhaustion and depersonalization.

After integrating our results, roughly two types of individuals with higher likelihood for burnout could be speculated. The first type consisted of those who were young, enthusiastic, and highly motivated to seek purpose but the excessive work load and minimal return foster burnout among them (Edelwich & Brodsky, 1980; Savicki & Cooley, 1987). This is reflected by the

positive correlation between burnout and motivation to seek purpose as well as the motivation to seek purpose being the best predictor of emotional exhaustion. The second consisted of those who were not enthusiastic and ideal oriented, had little purpose in life, but were more hedonistic, and they tended to be bored by their job easily. Hence they experienced burnout, especially in the component of depersonalization and personal accomplishment. (Cherniss & Krantz, 1983; Ruffin, 1982; Simmons, 1980). This is manifested in the negative relationship between purpose in life and depersonalization and the positive correlation between purpose in life and personal accomplishment and that between hedonistic way of life and depersonalization, as well as the findings that purpose in life was the best predictor of these two components of burnout. Actually, the latter type of burnout should be termed pseudo-burnout or "worn out" because they have never been "burned", exhausted, or disillusioned; they are not enthusiastic about the job, and has never had any ideal about the profession (Pines and Aronson, 1981). Thus, this can be differentiated from the real burnout in those people having high purpose in life, as well as not adopting a hedonistic way of life. Therefore, one possible way to resolve the controversy in the theorization and research on the nature and causes of burnout (Freudenberger, 1983) may be to separate these two types of burnout.

As for the exploratory comparison between the five

groups of mental health professions, when controlling for age and income, present findings showed that psychiatric nurses were the most depersonalized and reported the lowest personal accomplishment. This can be explained in terms of their lowest purpose in life and value-oriented way of life, together with their nature of work which involved constant and long-term contact with the psychiatric patients (Jones, 1987). For each of the five groups, with the exception of social workers, either purpose in life or motivation to seek purpose was the best predictor for all the subscales of burnout. Such a pattern was also found in the total population. Hence, the importance and robustness of the impact of these two variables on burnout were further confirmed. For social workers, monthly income predicted personal accomplishment best and monetary reward appears to exert a great impact on their vulnerability to burnout.

Results from our studies also have significant practical implications. During the selection and training process of the mental health professionals, especially the psychiatric nurses, existential elements such as Frankl's theory may be added so that they have more insight into their existential dynamics, and hopefully, they are more prepared for their future frontline work. In addition, special awareness and training groups or experiential workshops may be introduced early in their training so that these professional-to-be can learn how to develop certain

existential attitudes to buffer against later stress and adversity, such as developing various purposes in life. For those already in the mental health field, attempts to identify the presence and degree of burnout is desirable and is the first step of intervention. This can be done by looking at professionals' level of motivation to seek noetic goals and purpose in life as these are found to be robust predictors of burnout. With regard to the treatment of burnout, techniques based on increasing awareness of the existential elements of burnout, and the relationship between burnout and existential neurosis are particularly useful. As Bulka (1984) advocated, logotherapy can reverse burnout by focusing on the Frankl's philosophy of work, dereflection, experiential values, self-detachment, facing and accepting the unavoidable, appreciating one's finiteness, as well as self-transcendence towards meaning and the human ingredient in work.

Further research may focus on several areas. The study of the interaction of motivation to seek purpose and other variables such as the degree of frustration to find meaning, may lead to clearer understanding of Frankl's depiction of existential neurosis and its consequences. Besides, attempts to separate the two possible types of burnout as differentiated by the two existential variables (purpose in life and motivation to seek purpose) will lead to clearer and more fruitful understanding of burnout. In addition, studies on ways

to increase the professionals' meaningfulness orientation and to handle the frustration resulting from the search for meaning and purpose may be fruitful in alleviating burnout.

In summary, the existential variables of purpose in life and motivation to seek purpose were found to be significantly related to burnout, as well as being robust predictors of burnout. This neglected area of research is thus worth exploring, as the resolution of the controversy in current research on the causes of burnout may well be due to the inability to separate between those who differ in these two important existential variables.

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Appendix A

List of Associations and Organizations
from which the subjects were approached

1. Association of Government Nursing Staff
2. Against Child Abuse
3. Baptist Oi Kwan Social Service
4. Boys' and Girls' Clubs Association of Hong Kong
5. Breakthrough Counselling Centre
6. Caritas - Hong Kong
7. City Polytechnic of Hong Kong - Student Affairs Office
8. Chinese University of Hong Kong - Office of Student Affairs
9. Canossian Mission (Welfare Services)
10. The Chinese YMCA. of Hong Kong
11. Christian Family Service Centre
12. Diocesan Counselling Service
13. The Hong Kong Catholic Marriage Advisory Council
14. Hong Kong Christian Service
15. Hong Kong Children and Youth Services
16. Hong Kong Family Welfare Society
17. The Hong Kong Federation of Youth Groups
18. Hong Kong Lutheran Social Service
19. Hong Kong Polytechnic - Student Affairs Unit
20. Hong Kong PHAB Association
21. Hong Kong Psychiatric Association
22. Hong Kong Shue Yan College
23. Hong Kong Society for the Deaf
24. Hong Kong Young Women's Christian Association
25. International Social Service (Hong Kong Branch)
26. Prince of Wales Hospital (Medical Social Work Department)
27. Queen Mary Hospital (Medical Social Work Department)
28. Methodist Epworth Village Community Centre
29. Our Lady of Maryknoll Hospital Ltd
30. St. James Settlement
31. St. John's Cathedral (Christian Counselling Centre)
32. Yang Memorial Social Service Centre
33. University of Hong Kong (General Counselling Unit)

Appendix B

Package of questionnaire used in the survey

Dear Colleague,

The M.S.Sc. Programme in Clinical Psychology at the Psychology Department of the Chinese University of Hong Kong is currently embarking on a research project about job stress of mental health professionals in Hong Kong. We believe that our results will facilitate better understanding of the sources and manifestation of job stress and that these findings will have vital implications for the training and practice of mental health professionals.

We would like to ask for your cooperation and assistance in completing the enclosed questionnaire and sending it back to us by the enclosed return envelope. Your participation is vital to the execution of this significant research. All your responses to the questionnaire will remain anonymous and strictly confidential. If you like to have a summary of our findings, please send us your name and mailing address independent of the questionnaire returned. We would be most grateful if you would return preferably by 1989.

Thank you very much for your attention and assistance to our research project. If you have any questions, please contact us at 0-6952150.

Yours Sincerely,

Chan Yiu Kee,
Clinical Psychology Student,
Psychology Department.

Dr Catherine Tang,
Clinical Psychologist,
Lecturer,
Psychology Department.

Encl.

Appendix B - Continued

SURVEY ON THE JOB STRESS OF
MENTAL HEALTH PROFESSIONALS IN HONG KONG

-
1. This survey is carried out by the M.S.Sc. Programme in Clinical Psychology at the Psychology Department of the Chinese University of Hong Kong.
 2. Please answer all questions.
 3. All the information collected in this questionnaire will be kept in the strictest confidence.

Appendix B - Continued

1. Sex: _____
2. Age: _____
3. Marital Status: _____
4. Religion: _____
5. Job Title: _____
6. Number of years in your present post: _____
7. Number of years working in your field of work: _____
8. Nature of work setting: _____
9. Nature of work occupying the majority of your
working hours: _____
10. Highest degree received: _____
11. Theoretical Orientation: _____
12. Number of working hours per week: _____
13. Annual leave: _____ days per year
14. Approximate monthly income: _____

Please continue with the next page --->

Appendix B - Continued - Maslach Burnout Inventory

Please rate each of the following items in terms of how frequently you feel this way about your job.

+-----+	+-----+	+-----+	+-----+	+-----+	+-----+	+-----+
0	1	2	3	4	5	6
Never	A few	Once a	A few	Once	A few	Every
	times	month	times	a	times	day
	a year or less	a month	a month	week	a week	
	or less					

- ___ 1. I feel emotionally drained from my work.
- ___ 2. I feel used up at the end of the workday.
- ___ 3. I feel fatigued when I get up in the morning and have to face another day on the job.
- ___ 4. I can easily understand how my clients/patients feel about things.
- ___ 5. I feel I treat some clients/patients as if they were impersonal objects.
- ___ 6. Working with people all day is really a strain for me.
- ___ 7. I deal very effectively with the problems of my clients/patients.
- ___ 8. I feel burned out from my work.
- ___ 9. I feel I'm positively influencing other people's lives through my work.
- ___ 10. I have become more indifferent toward people since I took this job.
- ___ 11. I worry that this job is hardening me emotionally.
- ___ 12. I feel very energetic.
- ___ 13. I feel frustrated by my job.
- ___ 14. I feel I am working too hard on my job.
- ___ 15. I do not really care what happens to some clients/patients.
- ___ 16. Working with people directly puts too much stress on me.
- ___ 17. I can easily create a relaxed atmosphere with my clients/patients.
- ___ 18. I feel exhilarated after working closely with clients/patients.
- ___ 19. I have accomplished many worthwhile things in this job.
- ___ 20. I feel like I am at the end of my rope.
- ___ 21. In my work, I deal with emotional problems very calmly.
- ___ 22. I feel clients/patients blame me for some of their problems.

Please continue with the next page --->

Appendix B - Continued - Purpose in Life Test

Please rate the following statements on a 7-point scale:

- 1 - strongly disagree
- 2 - moderately disagree
- 3 - mildly disagree
- 4 - uncertain
- 5 - mildly agree
- 6 - moderately agree
- 7 - strongly agree

- ___ 1. I am usually exuberant, enthusiastic.
- ___ 2. Life to me seems always exciting.
- ___ 3. In life I have very clear goals and aims.
- ___ 4. My personal existence is very purposeful and meaningful.
- ___ 5. Every day is constantly new and different.
- ___ 6. If I could choose, I would like nine more lives just like this one.
- ___ 7. After retiring, I would do some of the exciting things I have always wanted to do.
- ___ 8. In achieving life goals, I have progressed to complete fulfillment.
- ___ 9. My life is running over with exciting good things.
- ___ 10. If I should die today, I would feel that my life has been very worthwhile.
- ___ 11. In thinking of my life, I always see a reason for my being here.
- ___ 12. As I view the world in relation to my life, the world fits meaningfully with my life.
- ___ 13. I am a very responsible person.
- ___ 14. Concerning man's freedom to make his own choices, I believe man is absolutely free to make all life choices.
- ___ 15. With regard to death, I am prepared, unafraid.
- ___ 16. With regard to suicide, I have never given it a second thought.
- ___ 17. I regard my ability to find a meaning, purpose, or mission in life as very great.
- ___ 18. My life is in my hands and I am in control of it.
- ___ 19. Facing my daily tasks is a source of pleasure and satisfaction.
- ___ 20. I have discovered clear-cut goals and a satisfying purpose.

Please continue with the next page --->

Appendix B - Continued - Seeking of Noetic Goals Test

Please rate the following statements on a 7-point scale:-

1	2	3	4	5	6	7
Never	Rarely	Occa- sionally	Some- times	Often	very often	Cons- tantly

- ___ 1. I think about the ultimate meaning of life.
- ___ 2. I have experienced the feeling that while I am destined to accomplish something important, I cannot quite put my finger on just what it is.
- ___ 3. I try new activities or areas of interest, and then these soon lose their attractiveness.
- ___ 4. I feel that some element which I can't quite define is missing from my life.
- ___ 5. I am restless.
- ___ 6. I feel that the greatest fulfillment of my life lies yet in the future.
- ___ 7. I hope for something exciting in the future.
- ___ 8. I daydream of finding a new place for my life and a new identity.
- ___ 9. I feel the lack of and a need to find a real meaning and purpose in my life.
- ___ 10. I think of achieving something new and different.
- ___ 11. I seem to change my main objective in life.
- ___ 12. The mystery of life puzzles and disturbs me.
- ___ 13. I feel myself in need of a "new lease on life".
- ___ 14. Before I achieve one goal, I start out towards a different one.
- ___ 15. I feel the need for adventure and "new worlds to conquer".
- ___ 16. Over my lifetime I have felt a strong urge to find myself.
- ___ 17. On occasion I have thought that I had found what I was looking for in life, only to have it vanish later.
- ___ 18. I have been aware of all-powerful and consuming purposes toward which my life has been directed.
- ___ 19. I have sensed a lack of a worthwhile job to do in life.
- ___ 20. I have felt a determination to achieve something far beyond the ordinary.

Please continue with the next page --->

Appendix B - Continued - Ways of Life Test

Instructions:

Below are "five ways of life" which various persons at various times have advocated and followed. We are interested to know the extent to which you agree or disagree with such matters of opinion. Please read each statement carefully and then indicate how much you agree or disagree with each of the statement on a 5-point scale:-

+	-----	+	-----	+	-----	+	-----	+
1		2		3		4		5
Strongly		Disagree		Uncertain		Agree		Strongly
disagree								agree

____ **Way 1.** The individual should be active socially, living outwardly and working with others toward the realization of common goals. Life finds its zest in social cooperation. Withholding one's participation in the group interferes and limits one's growth.

____ **Way 2.** In life an individual should for the most part "go it alone". One should be alone a lot and one should have time for meditation and awareness of self. The direction of interest should be away from intimate association with social groups. Not much can be done or is to be gained by living outwardly. Only the life turned inward is rewarding.

____ **Way 3.** The good things in life come of their own accord; they are not within the power of the individual. Willful action cannot lead to the realization of one's goals. Rather, good things come when the self has ceased to make demands, when one recognizes that one's future does not depend primarily on what one does. It is important to recognize the limits of one's power, one's weak position in the world.

____ **Way 4.** To be fully alive means more than exercising one's intelligence, one's capacity for friendship and love. The good life is directed and holds firm to high ideals. It is only by affirming one's ideals and by working toward the preservation of one's values and beliefs that one can give life significance and live it to its fullest.

____ **Way 5.** Life is to be enjoyed. Indeed, there are so many simple and easily obtainable pleasures: the pleasure of tasting food and having comfortable surroundings, the pleasure of being in the company of friends and resting and relaxing. Life should be viewed as a festival, a celebration and in no other terms. To enjoy life, to let yourself go, to let persons and things affect you is more important than doing good.

Appendix C

The response rates of questionnaire in
the five groups of mental health professionals

	Number of question- naires sent	Number of question- naires returned	Number of of valid question- naires	% of valid responses
Clinical Psychologists	51	23	23	45.10%
Psychiatrists	93	29	27	29.03%
Psychiatric Nurses	297	128	120	40.40%
Counsellors	68	23	22	32.40%
Social Workers	110	50	46	41.82%
Total	619	253	238	38.45%

Appendix D1

Means and Standard Deviations of continuous demographic variables

	Total Population (<u>N</u> = 238)		Male (<u>N</u> = 114)		Female (<u>N</u> = 124)	
	Means	<u>SD</u>	Means	<u>SD</u>	Means	<u>SD</u>
Age	32.21	7.10	34.78	7.98	29.80	5.13
Year in the post	4.05	3.58	4.92	4.16	3.26	2.73
Year in the field	9.18	6.69	11.20	7.57	7.32	5.15
No. of working hours per week	43.78	5.25	44.56	5.57	43.07	4.86
Days of annual leave	30.56	11.99	32.72	13.14	28.63	10.55
Monthly income	12500	11062	20345	14196	12300	4665

Appendix D2

Frequencies and percentages of nominal
demographic variables

	Total Population (<u>N</u> = 238) <u>N</u> %		Male (<u>N</u> = 114) <u>N</u> %		Female (<u>N</u> = 124) <u>N</u> %	
Marital Status						
Single	100	42.0	29	25.4	71	57.3
Married	137	57.6	84	73.7	53	42.7
Religion						
Christianity	78	32.8	37	32.5	41	33.1
Catholic	26	10.9	12	10.5	14	11.3
Others	7	2.9	4	3.5	3	2.4
nil	126	52.9	60	52.6	66	53.2
Job Title						
Clinical- Psychologist	23	9.7	9	7.9	14	11.3
Psychiatrist	27	11.3	26	22.8	1	.8
Psychiatric- nurse	120	50.4	60	52.6	60	48.4
Counselor	22	9.2	7	6.1	15	12.1
Social Worker	46	19.3	12	10.5	34	27.4
Work Setting						
Hospital/Clinic	155	65.1	88	77.2	67	54.0
Correctional	6	2.5	2	1.8	4	3.2
Welfare agency	44	18.5	17	14.9	27	21.8
School/College	33	13.9	7	6.1	26	21.0
Nature of work						
Case/Clinical	203	85.3	94	82.5	109	87.9
Teaching	4	1.7	2	1.8	2	1.6
Administration	28	11.8	17	14.9	11	8.9
Highest Degree						
Diploma	138	58.0	67	58.8	71	57.3
Bachelor	36	15.1	10	8.8	26	21.0
Master	37	15.5	12	10.5	25	20.2
MRCP	22	9.2	21	18.4	1	.8
Doctor	5	2.1	4	3.5	1	.8
Theoretical-Orientation						
Psychoanalytic	6	2.5	2	1.8	4	3.2
Cognitive/ behavioral	15	6.3	8	7.0	7	5.6
Humanistic	16	6.7	4	3.5	12	9.7
Eclectic	15	6.3	11	9.6	4	3.2
Others	41	17.2	18	15.8	23	18.5

Note: % included the missing data

Appendix D3

Means and Standard Deviations of continuous demographic variables for Clinical Psychologists

	Total (<u>N</u> = 23)		Male (<u>N</u> = 9)		Female (<u>N</u> = 14)	
	Means	<u>SD</u>	Means	<u>SD</u>	Means	<u>SD</u>
Age	34.22	8.90	40.22	11.40	30.36	3.61
Year in the post	3.74	3.41	6.33	3.77	2.07	1.82
Year in the field	7.66	9.04	11.83	11.72	3.69	3.26
No. of working hours per week	45.30	4.68	46.33	4.85	44.64	4.62
Days of annual leave	32.52	16.29	34.44	20.70	31.29	13.46
Monthly income	22731	7958	28632	7462	18938	5772

Appendix D4

Frequencies and percentages of nominal demographic
variables for Clinical Psychologists

	Total (<u>N</u> = 23)		Male (<u>N</u> = 9)		Female (<u>N</u> = 14)	
	<u>N</u>	%	<u>N</u>	%	<u>N</u>	%
Marital Status						
Single	10	43.5	1	11.1	9	64.3
Married	13	56.5	8	88.9	5	35.7
Religion						
Christianity	7	30.4	2	22.2	5	35.7
Catholic	4	17.4	2	22.2	2	14.3
Others	0	0.0	0	0.0	0	0.0
Nil	12	52.2	5	55.6	7	50.0
Work Setting						
Hospital/ Clinic	8	34.8	2	22.2	6	42.9
Correctional	6	26.1	2	22.2	4	28.6
Welfare agency	5	21.7	3	33.3	2	14.3
School/College	4	17.4	2	22.2	2	14.3
Nature of work						
Case/Clinical	19	82.6	7	77.8	12	85.7
Teaching	4	17.4	2	22.2	2	14.3
Administration	0	0.0	0	0.0	0	0.0
Highest Degree						
Diploma	0	0.0	0	0.0	0	0.0
Bachelor	0	0.0	0	0.0	0	0.0
Master	20	86.9	7	77.8	13	92.9
MRCP	0	0.0	0	0.0	0	0.0
Doctor	3	13.0	2	22.2	1	7.1
Theoretical-Orientation						
Psychoanalytic	4	17.4	0	0.0	4	28.6
Cognitive/ behavioral	8	34.8	4	44.4	4	28.6
Humanistic	3	13.0	2	22.2	1	7.1
Eclectic	7	30.4	3	33.3	4	28.6
Others	1	4.3	0	0.0	1	7.1

Note: % included the missing data

Appendix D5

Means and Standard Deviations of continuous demographic variables for Psychiatrists

	Total (<u>N</u> = 27)		Male (<u>N</u> = 26)		Female (<u>N</u> = 1)	
	Means	<u>SD</u>	Means	<u>SD</u>	Means	<u>SD</u>
Age	36.41	7.50	36.62	7.57	31.00	0.0
Year in the post	4.56	4.44	4.65	4.50	2.00	0.0
Year in the field	10.24	5.99	10.32	6.10	8.00	0.0
No. of working hours per week	48.31	9.60	48.48	9.75	44.00	0.0
Days of annual leave	39.89	16.64	40.92	16.10	14.00	0.0
Monthly income	38257	17014	38667	17233	28000	0

Appendix D6

Frequencies and percentages of nominal demographic
variables for Psychiatrists

	Total (<u>N</u> = 27)		Male (<u>N</u> = 26)		Female (<u>N</u> = 1)	
	<u>N</u>	%	<u>N</u>	%	<u>N</u>	%
Marital Status						
Single	5	18.5	4	15.4	1	100
Married	21	77.8	21	80.8	0	0.0
Religion						
Christianity	12	44.4	11	42.3	1	100
Catholic	3	11.1	3	11.5	0	0.0
Others	0	0.0	0	0.0	0	0.0
Nil	11	40.7	11	42.3	0	0.0
Work Setting						
Hospital/ Clinic	27	100	26	100	1	100
Correctional	0	0.0	0	0.0	0	0.0
Welfare agency	0	0.0	0	0.0	0	0.0
School/College	0	0.0	0	0.0	0	0.0
Nature of work						
Case/Clinical	26	96.3	25	96.2	1	100
Teaching	0	0.0	0	0.0	0	0.0
Administration	1	3.7	1	3.8	0	0.0
Highest Degree						
Diploma	0	0.0	0	0.0	0	0.0
Bachelor	4	14.8	4	15.4	0	0.0
Master	0	0.0	0	0.0	0	0.0
MRCP	22	81.5	21	80.8	1	100
Doctor	1	3.7	1	3.8	0	0.0
Theoretical-Orientation						
Psychoanalytic	2	7.4	2	7.7	0	0.0
Cognitive/ behavioral	1	3.7	1	3.8	0	0.0
Humanistic	0	0.0	0	0.0	0	0.0
Eclectic	8	29.6	8	30.8	0	0.0
Others	9	33.3	9	34.6	0	0.0

Note: % included missing data

Appendix D7

Means and Standard Deviations of continuous
demographic variables for Psychiatric Nurses

	Total (N = 120)		Male (N = 60)		Female (N = 60)	
	Means	<u>SD</u>	Means	<u>SD</u>	Means	<u>SD</u>
Age	32.22	7.03	34.63	7.72	29.72	5.22
Year in the post	4.87	3.59	5.30	4.08	4.44	2.98
Year in the field	11.33	6.34	13.03	7.13	9.63	4.92
No. of working hours per week	43.99	1.50	43.68	1.62	44.30	1.29
Days of annual leave	32.43	7.51	32.68	7.75	32.18	7.33
Monthly income	13092	3955	14085	4453	12132	3154

Appendix D8

Frequencies and percentages of nominal demographic
variables for Psychiatric Nurses

	Total (<u>N</u> = 120) <u>N</u> %		Male (<u>N</u> = 60) <u>N</u> %		Female (<u>N</u> = 60) <u>N</u> %	
Marital Status						
Single	46	38.3	16	26.7	30	50.0
Married	74	61.7	44	73.3	30	50.0
Religion						
Christianity	24	20.0	11	18.3	13	21.7
Catholic	14	11.7	5	8.3	9	15.0
Others	6	5.0	4	6.7	2	3.3
Nil	76	63.3	40	66.7	36	60.0
Work Setting						
Hospital/ Clinic	120	100	60	100	60	100
Correctional	0	0.0	0	0.0	0	0.0
Welfare agency	0	0.0	0	0.0	0	0.0
School/College	0	0.0	0	0.0	0	0.0
Nature of work						
Case/Clinical	95	79.2	45	75.0	50	83.3
Teaching	0	0.0	0	0.0	0	0.0
Administration	25	20.8	15	25.0	10	16.7
Highest Degree						
Diploma	119	99.2	59	98.3	60	100
Bachelor	1	.8	1	1.7	0	0.0
Master	0	0.0	0	0.0	0	0.0
MRCP	0	0.0	0	0.0	0	0.0
Doctor	0	0.0	1	3.8	0	0.0
Theoretical-Orientation						
Psychoanalytic	0	0.0	0	0.0	0	0.0
Cognitive/ behavioral	0	0.0	0	0.0	0	0.0
Humanistic	0	0.0	0	0.0	0	0.0
Eclectic	0	0.0	0	0.0	0	0.0
Others	120	100.0	60	100	60	100

Note: % included the missing data

Appendix D9

Means and Standard Deviations of continuous
demographic variables for Counsellors

	Total (N = 22)		Male (N = 7)		Female (N = 15)	
	Means	<u>SD</u>	Means	<u>SD</u>	Means	<u>SD</u>
Age	34.64	4.81	34.43	4.79	34.73	4.98
Year in the post	3.03	3.36	5.14	5.23	2.04	1.30
Year in the field	8.49	5.26	8.00	6.38	8.73	4.86
No. of working hours per week	38.77	8.80	41.14	2.27	37.67	10.48
Days of annual leave	30.00	16.19	24.14	14.88	32.73	16.53
Monthly income	13369	5887	14714	7868	12741	4912

Appendix D10

Frequencies and percentage of nominal demographic variables for Counsellors

	Total (<u>N</u> = 22) <u>N</u> %		Male (<u>N</u> = 7) <u>N</u> %		Female (<u>N</u> = 15) <u>N</u> %	
Marital Status						
Single	7	31.8	1	14.3	6	40.0
Married	15	68.2	6	85.7	9	60.0
Religion						
Christianity	15	68.2	6	85.7	9	60.0
Catholic	2	9.1	0	0.0	2	13.3
Others	0	0.0	0	0.0	0	0.0
Nil	5	22.7	1	14.3	4	26.7
Work Setting						
Hospital/ Clinic	0	0.0	0	0.0	0	0.0
Correctional	0	0.0	0	0.0	0	0.0
Welfare agency	10	45.5	4	57.1	6	40.0
School/College	12	54.5	3	42.9	9	60.0
Nature of work						
Case/Clinical	22	100	7	100	15	100
Teaching	0	0.0	0	0.0	0	0.0
Administration	0	0.0	0	0.0	0	0.0
Highest Degree						
Diploma	0	0.0	0	0.0	0	0.0
Bachelor	8	36.4	2	28.6	6	40.0
Master	13	59.1	4	57.1	9	60.0
MRCP	0	0.0	0	0.0	0	0.0
Doctor	1	4.5	1	14.3	0	0.0
Theoretical-Orientation						
Psychoanalytic	0	0.0	0	0.0	0	0.0
Cognitive/ behavioral	3	13.6	2	28.6	1	6.7
Humanistic	8	36.4	2	28.6	6	40.0
Eclectic	0	0.0	0	0.0	0	0.0
Others	7	31.8	1	14.3	6	40.0

Note: % included the missing data

Appendix D11

Means and Standard Deviations of continuous
demographic variables for Social Workers

	Total (<u>N</u> = 46)		Male (<u>N</u> = 12)		Female (<u>N</u> = 34)	
	Means	<u>SD</u>	Means	<u>SD</u>	Means	<u>SD</u>
Age	27.54	3.87	27.67	3.20	27.50	4.13
Year in the post	2.27	2.31	2.39	2.64	2.23	2.22
Year in the field	4.02	3.75	3.73	3.72	4.12	3.81
No. of working hours per week	42.28	3.61	41.42	3.75	42.59	3.57
Days of annual leave	19.60	3.00	19.50	3.73	19.64	2.76
Monthly income	9282	2597	9498	4012	9206	1951

Appendix D12

Frequencies and percentages of nominal demographic
variables for Social Workers

	Total (N = 46)		Male (N = 12)		Female (N = 34)	
	N	%	N	%	N	%
Marital Status						
Single	32	69.6	7	58.3	25	73.5
Married	14	30.4	5	41.7	9	26.5
Religion						
Christianity	20	43.5	7	58.3	13	38.2
Catholic	3	6.5	2	16.7	1	2.9
Others	1	2.2	0	0.0	1	2.9
Nil	22	47.8	3	25.0	19	55.9
Work Setting						
Hospital/ Clinic	0	0.0	0	0.0	0	0.0
Correctional	0	0.0	0	0.0	0	0.0
Welfare agency	29	63.0	10	83.3	19	55.9
School/College	17	37.0	2	16.7	15	44.1
Nature of work						
Case/Clinical	41	89.1	10	83.3	31	91.2
Teaching	0	0.0	0	0.0	0	0.0
Administration	2	4.3	1	8.3	1	2.9
Highest Degree						
Diploma	19	41.3	8	66.7	11	32.4
Bachelor	22	47.8	2	16.7	20	58.8
Master	5	10.9	2	16.7	3	8.8
MRCP	0	0.0	0	0.0	0	0.0
Doctor	0	0.0	0	0.0	0	0.0
Theoretical-Orientation						
Psychoanalytic	0	0.0	0	0.0	0	0.0
Cognitive/ behavioral	3	6.5	1	8.3	2	5.9
Humanistic	5	10.9	0	0.0	5	14.7
Eclectic	0	0.0	0	0.0	0	0.0
Others	24	52.2	8	66.7	16	47.1

Note: % included the missing data

Appendix E1

Means and Standard Deviations of major variables

	Total Population (<u>N</u> = 238)		Male (<u>N</u> = 114)		Female (<u>N</u> = 124)	
	Mean	<u>SD</u>	Mean	<u>SD</u>	Mean	<u>SD</u>
Emotional Exhaustion	23.42	9.99	22.67	11.10	24.10	8.86
Depersonalization	8.23	5.75	8.53	5.76	7.96	5.76
Personal Accomplishment	33.97	7.42	34.37	7.90	33.61	6.96
Purpose-in-life	98.63	17.14	94.95	18.23	99.25	16.12
Motivation to seek purpose	67.50	15.03	64.37	14.09	70.49	15.35
Way 1: Other-oriented	3.87	.92	3.86	.98	3.92	.85
Way 2: Self-oriented	2.38	.96	2.34	.99	2.41	.94
Way 3: Passive	3.05	1.08	2.96	1.08	3.13	1.07
Way 4: Value-oriented	3.89	.81	3.78	.81	3.98	.81
Way 5: Hedonistic	3.23	1.17	3.40	1.13	3.07	1.81

Appendix E2

Means and Standard Deviations of major variables
for Clinical Psychologists

	Total (N = 23)		Male (N = 9)		Female (N = 14)	
	Mean	<u>SD</u>	Mean	<u>SD</u>	Mean	<u>SD</u>
Emotional Exhaustion	20.48	7.03	19.00	8.68	21.43	5.91
Depersonalization	5.35	4.13	5.11	4.08	5.50	4.31
Personal Accomplishment	36.19	7.37	36.67	9.61	35.83	5.61
Purpose-in-life	101.17	19.87	101.11	21.51	101.21	19.58
Motivation to seek purpose	67.83	13.97	61.78	13.01	71.71	13.59
Way 1: Other-oriented	3.35	1.07	3.44	1.13	3.29	1.07
Way 2: Self-oriented	2.61	1.08	2.33	1.00	2.79	1.12
Way 3: Passive	2.74	1.25	2.11	1.05	3.14	1.23
Way 4: Value-oriented	4.30	.56	4.33	.50	4.29	.61
Way 5: Hedonistic	3.17	1.23	3.33	1.32	3.07	1.21

Appendix E3

Means and Standard Deviations of major variables
for Psychiatrists

	Total (<u>N</u> = 27)		Male (<u>N</u> = 26)		Female (<u>N</u> = 1)	
	Mean	<u>SD</u>	Mean	<u>SD</u>	Mean	<u>SD</u>
Emotional Exhaustion	22.26	12.59	22.15	12.83	25.00	0.0
Depersonal- ization	7.54	5.46	7.68	5.52	4.00	0.0
Personal Accomplish- ment	36.00	6.88	36.16	6.97	32.00	0.0
Purpose- in-life	103.30	17.51	103.42	17.84	100.00	0.0
Motivation to seek purpose	57.42	14.91	57.20	15.18	63.00	0.0
Way 1: Other- oriented	3.67	.88	3.65	.89	4.00	0.0
Way 2: Self- oriented	2.70	.91	2.69	.93	3.00	0.0
Way 3: Passive	2.67	1.00	2.69	1.01	2.00	0.0
Way 4: Value- oriented	3.74	.71	3.73	.72	4.00	0.0
Way 5: Hedonistic	3.67	.96	3.65	.98	4.00	0.0

Appendix E4

Means and Standard Deviations of major variables
for Psychiatric Nurses

	Total (<u>N</u> = 120)		Male (<u>N</u> = 60)		Female (<u>N</u> = 60)	
	Mean	<u>SD</u>	Mean	<u>SD</u>	Mean	<u>SD</u>
Emotional Exhaustion	24.72	10.57	23.63	11.62	25.78	9.42
Depersonalization	10.24	6.11	10.25	6.00	10.24	6.26
Personal Accomplishment	31.19	7.99	32.41	8.26	31.57	7.76
Purpose-in-life	93.77	15.58	91.68	16.38	95.82	14.59
Motivation to seek purpose	68.21	15.34	66.05	13.04	70.46	17.25
Way 1: Other-oriented	3.99	.92	3.98	.97	4.00	.88
Way 2: Self-oriented	2.19	.88	2.13	.91	2.25	.86
Way 3: Passive	3.20	1.07	3.17	1.08	3.23	1.06
Way 4: Value-oriented	3.69	.86	3.60	.87	3.78	.85
Way 5: Hedonistic	3.18	1.23	3.35	1.22	3.02	1.23

Appendix E5

Means and Standard Deviations of major variables
for Counsellors

	Total (N = 22)		Male (N = 7)		Female (N = 15)	
	Mean	SD	Mean	SD	Mean	SD
Emotional Exhaustion	19.38	6.83	20.71	6.21	18.71	7.25
Depersonalization	4.86	3.67	5.43	4.04	4.60	3.58
Personal Accomplishment	37.91	4.21	39.00	5.77	37.40	3.38
Purpose-in-life	107.23	13.23	111.14	13.08	105.40	13.34
Motivation to seek purpose	66.75	11.04	67.17	14.29	66.57	9.98
Way 1: Other-oriented	4.00	.62	3.86	.90	4.07	.46
Way 2: Self-oriented	2.50	1.10	2.29	.95	2.60	1.18
Way 3: Passive	3.14	1.04	3.14	1.07	3.13	1.06
Way 4: Value-oriented	4.14	.56	4.14	.38	4.13	.64
Way 5: Hedonistic	3.55	.96	3.57	.79	3.53	1.06

Appendix E6

Means and Standard Deviations of major variables
for Social Workers

	Total (N = 46)		Male (N = 12)		Female (N = 34)	
	Mean	SD	Mean	SD	Mean	SD
Emotional Exhaustion	24.11	8.68	23.08	8.67	24.47	8.78
Depersonal- ization	6.48	4.48	6.08	4.12	6.62	4.65
Personal Accomplish- ment	34.94	6.01	35.67	5.58	34.68	6.22
Purpose- in-life	103.18	17.80	106.83	18.11	101.85	17.78
Motivation to seek purpose	72.00	14.23	71.83	12.83	72.07	14.97
Way 1: Other- oriented	3.87	.89	3.58	1.17	3.97	.76
Way 2: Self- oriented	2.50	.98	2.67	1.30	2.44	.86
Way 3: Passive	2.98	1.02	3.00	.95	2.97	1.06
Way 4: Value- oriented	4.15	.79	4.17	.72	4.15	.82
Way 5: Hedonistic	2.96	1.12	3.08	1.08	2.91	1.14

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